

**REMARKS**

Upon entry of the above amendment, claims 15-30 will be pending in the present application. Applicants respectfully submit that the newly submitted claims do not add any new matter within the meaning of 35 USC §132.

**1. Priority of Application**

The Official Action states that "This application...claims the priority of EP 00106695, filed 3/29/00. The priority document...is not in the file." The Official Action also states that "an application in which the benefits of an earlier application are desired must contain a specific reference to the prior applications in the first sentence of the specification..."

**RESPONSE**

Regarding the priority document not being present in the file, applicants respectfully point out to the Examiner the relevant section of MPEP 1896, which states:

Where applicant filed an international application claiming priority to an earlier filed national application, the certified copy of the priority application is required to be provided to the International Bureau by applicant during the international stage. The International Bureau (WIPO) then sends a copy of the certified copy of the priority application to each designated office for inclusion in the national stage application. A U.S. National stage application filed under 35 USC 371 will have a photocopy of the priority document with the first page stamped by the International Bureau to indicate that it is a priority document received by WIPO and the date of such

receipt. Such a photocopy is acceptable in a U.S. national stage application to establish that applicant has filed a certified copy of the priority document. If the photocopy is missing from the national stage application file, either the document has been misplaced or it was not provided due to a defect in priority during the international stage.

Applicants have attached herewith a copy of the PCT IB/304 form which indicates that a copy of the priority document was properly submitted during international prosecution. Further, in the parent application, USSN 10/182,619, the Notification of Missing Requirements under 35 USC 371, mailed 9-23-2002, states that the Priority Document was submitted by the applicant or the International Bureau to the USPTO as an Elected Office.

Thus, according to MPEP 1896, the priority document submitted must have been misplaced. Accordingly, applicants have fulfilled their duty by submitting a certified copy of the priority application during international prosecution and should bear no further cost or responsibility regarding providing the Examiner with an additional certified copy of the priority document.

Further, applicants respectfully draw the Examiner's attention to the Preliminary Amendment filed April 19, 2004, in which a specification amendment was presented to properly identify the priority data of the present application.

Accordingly, applicants respectfully request that the Examiner properly acknowledge applicants' claim to priority in the next communication in this application.

2. Rejection of claims 1-10 and 14 under 35 U.S.C. §112,

2<sup>nd</sup> paragraph

The Official Action states that claims 1-10 and 14 are rejected under 35 U.S.C. §112, 2<sup>nd</sup> paragraph as being indefinite for various reasons.

RESPONSE

Applicants respectfully point out that previous claims 1-10 and 14 have been canceled without prejudice to or disclaimer of the subject matter contained therein, rendering the basis for this rejection moot. Further, new claims 15-30 have been introduced.

However, applicants respectfully point out the following to the Examiner. First, the phrase "radical from which a hydroxyl group is formed under physiological conditions" is not present in the newly submitted claims. Also, the term "-OR'" is now recited in new independent claim 15. Further, the phrase "gastrointestinal illnesses" has been amended to recite the phrase "gastrointestinal illness caused by gastric acid". Moreover, the newly submitted claims do not contain any double dependencies. Also, the newly submitted claims recite "therapeutically effective amount".

Accordingly, applicants respectfully request that the Examiner reconsider and withdraw these rejections.

3. Rejection of claims 1-4, 6-7 and 9-14 under 35 U.S.C. §112,

1<sup>st</sup> paragraph

The Official Action states that claims 1-4, 6-7 and 9-14 are rejected under 35 U.S.C. §112, 1<sup>st</sup> paragraph, as lacking written description for the term "hydrate".

RESPONSE

Applicants respectfully point out that previous claims 1-4, 6-7 and 9-14 have been canceled without prejudice to or disclaimer of the subject matter contained therein, rendering the basis for this rejection moot for the previously rejected claims. Further, new claims 15-30 have been introduced.

However, applicants respectfully point out that the newly submitted claims contain the term "hydrate" and that the specification clearly contains written description for the term "hydrate". In particular, applicants respectfully point out that the term "hydrate" has clear basis in the specification at page 7, 2<sup>nd</sup> paragraph.

Accordingly, applicants respectfully request that the Examiner reconsider and withdraw this rejection.

4. Rejection of claims 10 and 14 under 35 U.S.C. §112,

1<sup>st</sup> paragraph

The Official Action states that claims 10 and 14 are rejected under 35 U.S.C. §112, 1<sup>st</sup> paragraph, as lacking enablement for a method of treating gastrointestinal illnesses caused by microorganism or bacterial toxins.

RESPONSE

Applicants again respectfully point out that previous claims 10 and 14 have been canceled without prejudice to or disclaimer of the subject matter contained therein, rendering the basis for this rejection moot for the previously rejected claims. Further, new claims 15-30 have been introduced.

Applicants respectfully traverse the basis for this rejection. However, solely to remove the basis for this rejection in the newly submitted claims, applicants note that the phrase "gastrointestinal illnesses" has been amended to recite the phrase "gastrointestinal illness caused by gastric acid". The Examiner has indicated that such a claim is enabled by the present specification. In particular, applicants respectfully point to the Examiner's statement at page 5, paragraph 2 of the Official Action: "The specification, while providing enablement for treating gastrointestinal illnesses of acid level origin..." (emphasis added)

In this regard, claims 29 and 30 have been added to further

identify the specific diseases presently claimed. Basis for the following specific diseases may be found at page 43, 2<sup>nd</sup> paragraph: gastric ulcer, duodenal ulcer, gastritis, hyperacidic functional gastropathy, medicament-related functional gastropathy, reflux esophagitis, Zollinger-Ellison syndrome and heartburn. The disease "peptic ulcer bleeding" is not specifically mentioned in the application, but is well known by a person of ordinary skill in the art to be caused by gastric acid.

Accordingly, applicants respectfully request that the Examiner reconsider and withdraw these rejections.

**5. Rejection of claims 1-14 under 35 U.S.C. §103(a)**

The Official Action states that claims 1-14 stand rejected under 35 U.S.C. §103(a) as being unpatentable over US Patent No. 6,197,783 (i.e., the '783 patent) to Senn-Bilfinger, et al. in view of Bundgaard et al., Budt et al., Schulte et al. and Aungst.

**RESPONSE**

Applicants again respectfully point out that previous claims 1-14 have been canceled without prejudice to or disclaimer of the subject matter contained therein, rendering the basis for this rejection moot for these claims. Further, new claims 15-30 have been introduced.

However, applicants respectfully traverse the basis of this rejection. Applicants respectfully assert that this rejection is

improper since the '783 patent is not prior art against the instant application. In particular, applicants respectfully point out that the '783 patent is only available as a reference against the instant application under 35 U.S.C. §102(e), since its publication date (March 6, 2001) is after the instant application's priority date of March 29, 2000.

The instant application is assigned to Altana Pharma AG in Konstanz, Germany. Likewise, the '783 patent, previously assigned to Byk Gulden Lomberg Chemische Fabrik GmbH, has also been assigned to Altana Pharma AG in Konstanz, Germany due to a change of name. The change of name for the '783 patent is recorded at Reel 13128, Frame 0431.

Accordingly, because this application is "owned by the same person or subject to an obligation of assignment to the same person" as set forth in 35 U.S.C. §103(c), a reference used under §102(e) is not considered prior art for patentability purposes.

Accordingly, applicants respectfully request the Examiner to reconsider and withdraw this rejection.

**6. Rejection of claims 1-14 under 35 U.S.C. §103(a)**

The Official Action states that claims 1-14 stand rejected under 35 U.S.C. §103(a) as being unpatentable over US Patent No. 6,160,119 (i.e., the '119 patent) to Senn-Bilfinger in view of Bundgaard et al., Budt et al., Schulte et al. and Aungst.

**RESPONSE**

Applicants again respectfully point out that previous claims 1-14 have been canceled without prejudice to or disclaimer of the subject matter contained therein, rendering the basis for this rejection moot for these claims. Further, new claims 15-30 have been introduced.

However, applicants respectfully traverse this rejection. Applicants respectfully assert that this rejection is improper since the '119 patent is not prior art against the instant application. In particular, applicants respectfully point out that the '119 patent is only available as a reference against the instant application under 35 U.S.C. §102(e), since its publication date (December 12, 2000) is after the instant application's priority date of March 29, 2000.

The instant application is assigned to Altana Pharma AG in Konstanz, Germany. Likewise, the '119 patent, previously assigned to Byk Gulden Lomberg Chemische Fabrik GmbH, has also been assigned to Altana Pharma AG in Konstanz, Germany due to a change of name. The change of name for the '119 patent is recorded at Reel 13128, Frame 0431.

Accordingly, because this application is "owned by the same person or subject to an obligation of assignment to the same person" as set forth in 35 U.S.C. §103(c), a reference used under §102(e) is not considered prior art for patentability purposes.

Accordingly, applicants respectfully request the Examiner to



reconsider and withdraw this rejection.

**7. Rejection of claims 1-14 under 35 U.S.C. §103(a)**

The Official Action states that claims 1-14 stand rejected under 35 U.S.C. §103(a) as being anticipated by WO 98/42707 (the '707 publication) to Simon et al. in view of Bundgaard et al., Budt et al., Schulte et al. and Aungst.

**RESPONSE**

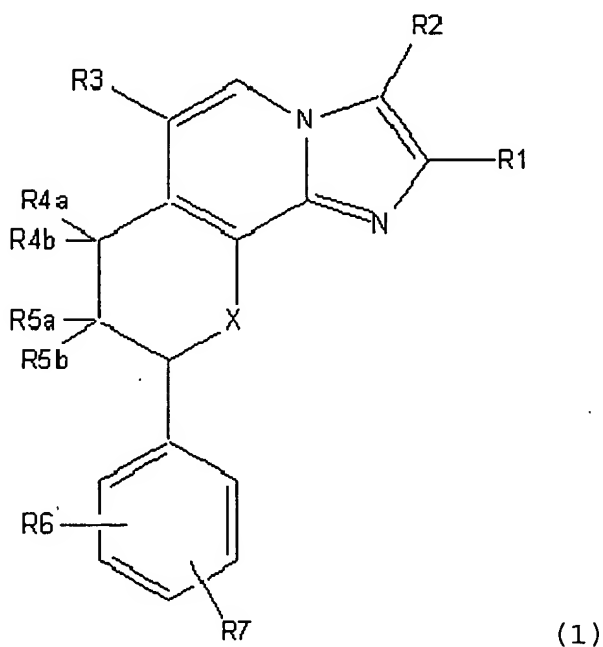
Applicants again respectfully point out that previous claims 1-14 have been canceled without prejudice to or disclaimer of the subject matter contained therein, rendering the basis for this rejection moot for these claims. Further, new claims 15-30 have been introduced.

However, applicants respectfully traverse the basis of this rejection. To establish a *prima facie* case of obviousness, the PTO must satisfy three requirements. First, the prior art relied upon, coupled with the knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference. *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Second, the proposed modification of the prior art must have had a reasonable expectation of success, determined from the vantage point of the skilled artisan at the time the invention was made. *Amgen Inc. v. Chugai Pharm. Co.*, 18 USPQ2d 1016, 1023 (Fed. Cir.

1991). Lastly, the prior art references must teach or suggest all the limitations of the claims. *In re Wilson*, 165 USPQ 494, 496 (C.C.P.A. 1970).

**a. The Presently Claimed Invention**

Presently pending independent claim 15 is drawn to a compound of the formula 1,



in which

R1 is methyl,

R2 is methyl,

R3 is hydrogen,

one of the substituents R4a and R4b is hydrogen and the other is 1-4C-alkoxy or 1-4C-alkoxy-1-4C-alkoxy,

R5a is the radical -OR',

R5b is hydrogen,

R6 is hydrogen,

R7 is hydrogen and

X is O (oxygen) or NH,

and where

R' is selected from the group consisting of

-C(O)-NR<sub>8</sub>R<sub>9</sub>,

-C(O)-alk-NR<sub>8</sub>R<sub>9</sub>,

-C(O)-alk-C(O)-NR<sub>8</sub>R<sub>9</sub>,

-P(O)(OH)<sub>2</sub>,

-S(O)<sub>2</sub>NR<sub>8</sub>R<sub>9</sub>,

-C(O)-R<sub>8</sub>,

-C(O)-C<sub>6</sub>H<sub>3</sub>R<sub>10</sub>R<sub>11</sub>,

-C(O)-OR<sub>8</sub>,

-C(O)-alk-C(O)-R<sub>8</sub>,

-C(O)-alk-C(O)-OR<sub>8</sub>,

-C(O)-C(O)-R<sub>8</sub>,

-C(O)-C(O)-OR<sub>8</sub> and

-CH<sub>2</sub>-OR<sub>8</sub>,

where

alk is 1-7C-alkylene,

R<sub>8</sub> is hydrogen, 1-10C-alkyl or 1-4C-alkyl substituted by halogen, carboxyl, hydroxyl, sulfo (-SO<sub>3</sub>H), sulfamoyl (-SO<sub>2</sub>NH<sub>2</sub>), carbamoyl (-CONH<sub>2</sub>), 1-4C-alkoxy or 1-4C-alkoxycarbonyl,

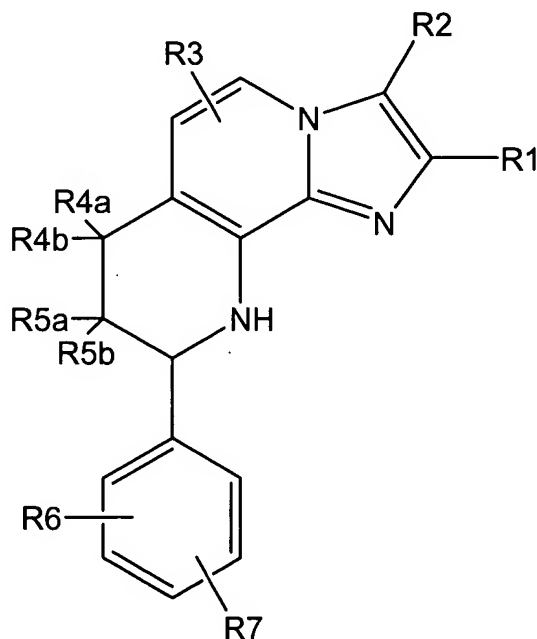
R<sub>9</sub> is hydrogen or 1-4C-alkyl,

R<sub>10</sub> is hydrogen, halogen, nitro, 1-4C-alkyl, 1-4C-alkoxy, 1-4C-

alkoxycarbonyl, 1-4C-alkoxycarbonylamino, 1-4C-alkoxy-1-4C-alkoxycarbonylamino or trifluoromethyl and  
R11 is hydrogen, halogen, 1-4C-alkyl or 1-4C-alkoxy.  
or a hydrate, solvate, salt, hydrate of a salt or solvate of a salt thereof.

**b. The Teachings of the Cited Art**

Simon et al. teaches compounds of the formula



wherein

R1 is 1-4C-alkyl,

R2 is 1-4C-alkyl or hydroxyl-1-4C-alkyl,

R3 is hydrogen or halogen, one of the substituents R4a and R4b is hydrogen and the other is hydrogen, hydroxyl, 1-4C-alkoxy, 1-4C-

alkoxy-1-4C-alkoxy or 1-4C-alkylcarbonyloxy, or in which R4a and R4b together are O (oxygen),

one of the substituents R5a and R5b is hydrogen and the other is hydrogen, hydroxyl, 1-4C-alkoxy, 1-4C-alkoxy-1-4C-alkoxy or 1-4C-alkylcarbonyloxy, or in which R5a and R5b together are O (oxygen), or in which

one of the substituents R4a and R4b on the one hand and one of the substituents R5a and R5b on the other hand is in each case hydrogen, and the other substituents in each case together form a methylenedioxy radical (-O-CH<sub>2</sub>-O-) or an ethylenedioxy radical (-O-CH<sub>2</sub>-CH<sub>2</sub>-O-),

where R4a, R4b, R5a and R5b are not simultaneously hydrogen, R6 is hydrogen, halogen, 1-4C-alkyl, 1-4C-alkoxy, 1-4C-alkoxycarbonylamino, 1-4C-alkoxy-1-4C-alkoxycarbonylamino or trifluoromethyl and

R7 is hydrogen, halogen, 1-4C-alkyl or 1-4C-alkoxy.

Bundgaard et al. simply teach general characteristics of prodrugs and in particular, "the best known prodrugs are in fact esters of drugs containing hydroxyl or carboxyl groups." Bundgaard et al. also list in Table 2, examples of ester derivatives developed as prodrugs for drugs containing a hydroxyl group. Nowhere does the Bundgaard et al. reference contain any evidence of a suggestion or incentive that would have motivated the skilled artisan to combine its teachings with the teachings of the Simon et

al. reference to arrive at the presently claimed invention as required by *In re Fine*.

Likewise, the Budt et al. (DE4308095) abstract does not remedy these deficiencies. The Budt et al. abstract generally teaches prodrugs of hydroxy containing pharmaceuticals are readily soluble in water and have better bioavailability than the residue of a pharmaceutical from which 1-3 OH has been deleted. The Budt et al. abstract does not teach prodrugs of imidazopyridine derivatives. Further, in no way does the Budt et al. abstract contain any evidence of a suggestion or incentive that would have motivated the skilled artisan to combine its teaching with the teachings of the Simon et al. reference to arrive at the presently claimed invention as required by *In re Fine*.

Schulte et al. also does not remedy these deficiencies. Schulte et al. teach the use of rapamycin prodrugs as immunosuppressant agents; e.g. for use in a human host in the treatment of autoimmune diseases and/or prevention of organ transplant rejections, intermediates formed in the preparation of the prodrugs as well as the prodrugs themselves. Schulte et al. do not teach prodrugs of imidazopyridine derivatives. Further, in no way does the Schulte et al. reference contain any evidence of a suggestion or incentive that would have motivated the skilled artisan to combine its teaching with the teachings of the Simon et al. reference to arrive at the presently claimed invention as required by *In re Fine*.

Further, Aungst does not remedy these deficiencies. Aungst teaches that ester prodrugs of 3-hydroxymorphinans lack the bitter taste of parent compounds and provide enhanced bioavailability of 3-hydroxymorphinans from buccal, nasal and sublingual dosage forms. Aungst does not teach prodrugs of imidazopyridine derivatives and contains no motivation to combine its teachings with the teachings of the Simon et al. reference to arrive at the presently claimed invention.

**c. No prima facie case of obviousness has been shown by the Examiner**

First, as outlined above, no teaching can be found in the cited references which would motivate the skilled artisan to pick and choose the particular substituents which make up the presently claimed genus as required by *In re Fine*.

Further, applicants would like to respectfully point out to the Examiner that under U.S. patent law, a sub-genus may be separately patentable over a previously disclosed genus.

Accordingly, applicants respectfully request that the Examiner reconsider and withdraw this rejection.

**8. Rejection of claims 1-14 under 35 U.S.C. §103(a)**

The Official Action states that claims 1-14 stand rejected under 35 U.S.C. §103(a) as being anticipated by WO 98/54188 (the '188 publication) to Grundler et al. in view of Bundgaard et al.,

Budt et al., Schulte et al. and Aungst.

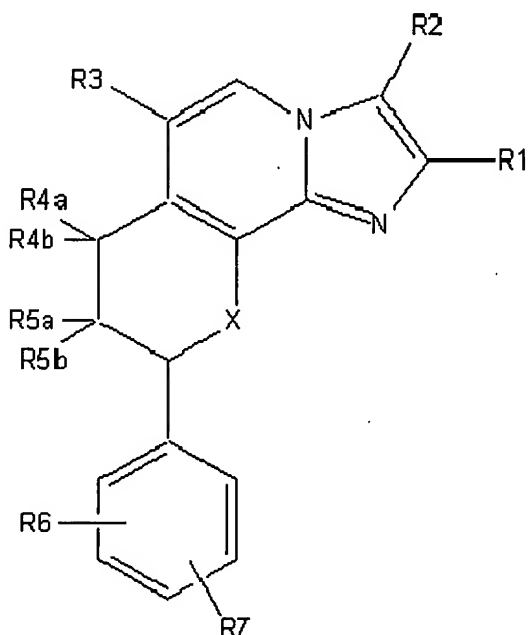
RESPONSE

Previous claims 1-14 have been canceled without prejudice to or disclaimer of the subject matter contained therein, rendering the basis for this rejection moot for these claims. Further, new claims 15-30 have been introduced.

However, applicants respectfully traverse the basis of this rejection. The Examiner has not shown a *prima facie* case of obviousness with respect to the presently rejected claims.

a. The Presently Claimed Invention

Presently pending independent claim 15 is drawn to a compound of the formula 1,





in which

R1 is methyl,

R2 is methyl,

R3 is hydrogen,

one of the substituents R4a and R4b is hydrogen and the other is 1-4C-alkoxy or 1-4C-alkoxy-1-4C-alkoxy,

R5a is the radical -OR',

R5b is hydrogen,

R6 is hydrogen,

R7 is hydrogen and

X is O (oxygen) or NH,

and where

R' is selected from the group consisting of

-C(O)-NR<sub>8</sub>R<sub>9</sub>,

-C(O)-alk-NR<sub>8</sub>R<sub>9</sub>,

-C(O)-alk-C(O)-NR<sub>8</sub>R<sub>9</sub>,

-P(O)(OH)<sub>2</sub>,

-S(O)<sub>2</sub>NR<sub>8</sub>R<sub>9</sub>,

-C(O)-R<sub>8</sub>,

-C(O)-C<sub>6</sub>H<sub>3</sub>R<sub>10</sub>R<sub>11</sub>,

-C(O)-OR<sub>8</sub>,

-C(O)-alk-C(O)-R<sub>8</sub>,

-C(O)-alk-C(O)-OR<sub>8</sub>,

-C(O)-C(O)-R<sub>8</sub>,

-C(O)-C(O)-OR<sub>8</sub> and

-CH<sub>2</sub>-OR<sub>8</sub>,

where

alk is 1-7C-alkylene,

R<sub>8</sub> is hydrogen, 1-10C-alkyl or 1-4C-alkyl substituted by halogen, carboxyl, hydroxyl, sulfo (-SO<sub>3</sub>H), sulfamoyl (-SO<sub>2</sub>NH<sub>2</sub>), carbamoyl (-CONH<sub>2</sub>), 1-4C-alkoxy or 1-4C-alkoxycarbonyl,

R<sub>9</sub> is hydrogen or 1-4C-alkyl,

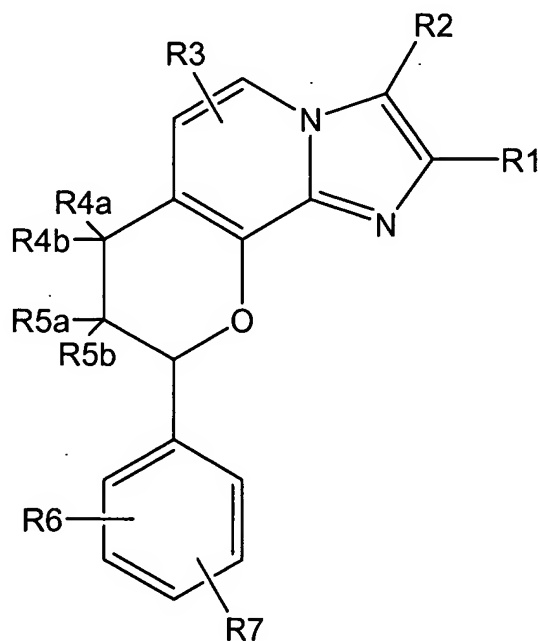
R<sub>10</sub> is hydrogen, halogen, nitro, 1-4C-alkyl, 1-4C-alkoxy, 1-4C-alkoxycarbonyl, 1-4C-alkoxycarbonylamino, 1-4C-alkoxy-1-4C-alkoxycarbonylamino or trifluoromethyl and

R<sub>11</sub> is hydrogen, halogen, 1-4C-alkyl or 1-4C-alkoxy.

or a hydrate, solvate, salt, hydrate of a salt or solvate of a salt thereof.

**b. The Teachings of the Cited Art**

Grundler et al. teaches compounds of the formula



wherein

R1 is 1-4C-alkyl,

R2 is 1-4C-alkyl or hydroxyl-1-4C-alkyl,

R3 is hydrogen or halogen, one of the substituents R4a and R4b is hydrogen and the other is hydrogen, hydroxyl, 1-4C-alkoxy, 1-4C-alkoxy-1-4C-alkoxy or 1-4C-alkylcarbonyloxy, or in which R4a and R4b together are O (oxygen),

one of the substituents R5a and R5b is hydrogen and the other is hydrogen, hydroxyl, 1-4C-alkoxy, 1-4C-alkoxy-1-4C-alkoxy or 1-4C-alkylcarbonyloxy, or in which R5a and R5b together are O (oxygen), where R4a, R4b, R5a and R5b are not simultaneously hydrogen,

or in which

one of the substituents R4a and R4b on the one hand and one of the substituents R5a and R5b on the other hand is in each case hydrogen, and the other substituents in each case together form a methylenedioxy radical (-O-CH<sub>2</sub>-O-) or an ethylenedioxy radical (-O-CH<sub>2</sub>-CH<sub>2</sub>-O-),

R6 is hydrogen, halogen, 1-4C-alkyl, 1-4C-alkoxy, 1-4C-alkoxycarbonylamino, 1-4C-alkoxy-1-4C-alkoxycarbonylamino or trifluoromethyl and

R7 is hydrogen, halogen, 1-4C-alkyl or 1-4C-alkoxy.

Bundgaard et al. simply teaches general characteristics of prodrugs and in particular, "the best known prodrugs are in fact esters of drugs containing hydroxyl or carboxyl groups." Bundgaard

et al. also list in Table 2, examples of ester derivatives developed as prodrugs for drugs containing a hydroxyl group. Nowhere does the Bundgaard et al. reference contain any evidence of a suggestion or incentive that would have motivated the skilled artisan to combine its teachings with the teachings of the Grundler et al. reference to arrive at the presently claimed invention as required by *In re Fine*.

Likewise, the Budt et al. (DE4308095) abstract does not remedy these deficiencies. The Budt et al. abstract generally teaches prodrugs of hydroxy containing pharmaceuticals are readily soluble in water and have better bioavailability than the residue of a pharmaceutical from which 1-3 OH has been deleted. The Budt et al. abstract does not teach prodrugs of imidazopyridine derivatives. Further, in no way does the Budt et al. abstract contain any evidence of a suggestion or incentive that would have motivated the skilled artisan to combine its teaching with the teachings of the Grundler et al. reference to arrive at the presently claimed invention as required by *In re Fine*.

Schulte et al. also does not remedy these deficiencies. Schulte et al. teach the use of rapamycin prodrugs as immunosuppressant agents, e.g. for use in a human host in the treatment of autoimmune diseases and/or prevention of organ transplant rejections, intermediates formed in the preparation of the prodrugs as well as the prodrugs themselves. Schulte et al. do not teach prodrugs of imidazopyridine derivatives. Further, in no

way does the Schulte et al. reference contain any evidence of a suggestion or incentive that would have motivated the skilled artisan to combine its teaching with the teachings of the Grundler et al. reference to arrive at the presently claimed invention as required by *In re Fine*.

Further, Aungst does not remedy these deficiencies. Aungst teaches that ester prodrugs of 3-hydroxymorphinans lack the bitter taste of parent compounds and provide enhanced bioavailability of 3-hydroxymorphinans from buccal, nasal and sublingual dosage forms. Aungst does not teach prodrugs of imidazopyridine derivatives and contains no motivation to combine its teachings with the teachings of the Grundler et al. reference to arrive at the presently claimed invention.

**c. No prima facie case of obviousness has been shown by the Examiner**

First, as outlined above, no teaching can be found in the cited references which would motivate the skilled artisan to pick and choose the particular substituents which make up the presently claimed genus as required by *In re Fine*.

Further, applicants would like to respectfully point out to the Examiner that under U.S. patent law, a sub-genus may be separately patentable over a previously disclosed genus.

Accordingly, applicants respectfully request that the Examiner reconsider and withdraw this rejection.

**9. Rejection of claims 1-14 under 35 U.S.C. §103(a)**

The Official Action states that claims 1-14 stand rejected under 35 U.S.C. §103(a) as being unpatentable over WO 00/26217 (i.e., the '217 application) to Senn-Bilfinger. in view of Bundgaard et al., Budt et al., Schulte et al. and Aungst.

**RESPONSE**

Previous claims 1-14 have been canceled without prejudice to or disclaimer of the subject matter contained therein, rendering the basis for this rejection moot for these claims. Further, new claims 15-30 have been introduced.

However, applicants respectfully traverse the basis of this rejection. Applicants respectfully assert that this rejection is improper since the '217 application is not prior art against the instant application.

In particular, applicants respectfully point out that the '217 application is only available as a reference against the instant application under 35 U.S.C. §102(e), since its publication date (May 11, 2000) is after the instant application's priority date of March 29, 2000.

However, this reference cannot be considered prior art against the present application under §102(e). The Examiner has misapplied the law because the '217 application has an international filing date that is prior to November 29, 2000. As such, it is unavailable as a reference under §102(e). See MPEP

706.02(a)(II)(C).

Accordingly, applicants respectfully request the Examiner to reconsider and withdraw this rejection.

**10. Rejection of claims 1-14 for Obviousness-type Double**

**Patenting**

The Official Action states that claims 1-14 stand rejected under the doctrine of obviousness-type double patenting over claims 1-8 of U.S. Patent No. 6,916,825 to Senn-Bilfinger et al. (i.e., the '825 patent).

**RESPONSE**

Previous claims 1-14 have been canceled without prejudice to or disclaimer of the subject matter contained therein, rendering the basis for this rejection moot for these claims. Further, new claims 15-30 have been introduced.

However, applicants respectfully traverse the basis for this rejection. The newly presented claims have a different scope than previous claims 1-14 and are not an obvious variation of the claims of the '825 patent.

Accordingly, applicants respectfully request the Examiner to reconsider and withdraw this rejection.

**11.Rejection of claims 1-14 for Obviousness-type Double**

**Patenting**

The Official Action states that claims 1-14 stand rejected under the doctrine of obviousness-type double patenting over claims 1-11 of U.S. Patent No. 6,384,048 to Senn-Bilfinger et al. (i.e., the '048 patent).

**RESPONSE**

Previous claims 1-14 have been canceled without prejudice to or disclaimer of the subject matter contained therein, rendering the basis for this rejection moot for these claims. Further, new claims 15-30 have been introduced.

However, applicants respectfully traverse the basis for this rejection. The newly presented claims have a different scope than previous claims 1-14 and are not an obvious variation of the claims of the '048 patent.

Accordingly, applicants respectfully request the Examiner to reconsider and withdraw this rejection.

**12.Rejection of claims 1-14 for Obviousness-type Double**

**Patenting**

The Official Action states that claims 1-14 stand rejected under the doctrine of obviousness-type double patenting over claims 1-10 of U.S. Patent No. 6,160,119 (i.e., the '119 patent) or claims 1-14 of U.S. Patent No. 6,197,783 (i.e., the '783 patent) in view



of Bundgaard et al., Budt et al., Schulte et al. and Aungst.

### RESPONSE

Previous claims 1-14 have been canceled without prejudice to or disclaimer of the subject matter contained therein, rendering the basis for this rejection moot for these claims. Further, new claims 15-30 have been introduced.

However, applicants respectfully traverse the basis for this rejection. The newly presented claims have a different scope than previous claims 1-14 and are not an obvious variation of the claims of the '119 patent or the '783 patent.

Accordingly, applicants respectfully request the Examiner to reconsider and withdraw this rejection.

### 13. Rejection of claims 1-14 for Obviousness-type Double

#### Patenting

The Official Action states that claims 1-14 stand rejected under the doctrine of obviousness-type double patenting over claims 1-13 of U.S. Patent No. 6,436,953 (i.e., the '953 patent) in view of Bundgaard et al., Budt et al., Schulte et al. and Aungst.

### RESPONSE

Previous claims 1-14 have been canceled without prejudice to or disclaimer of the subject matter contained therein, rendering the basis for this rejection moot for these claims. Further, new

claims 15-30 have been introduced.

However, applicants respectfully traverse the basis for this rejection. The newly presented claims have a different scope than previous claims 1-14 and are not an obvious variation of the claims of the '953 patent.

Accordingly, applicants respectfully request the Examiner to reconsider and withdraw this rejection.

**14. Provisional Rejection of claims 1-9, 11 and 13 for**  
**Obviousness-type Double Patenting**

The Official Action states that claims 1-9, 11 and 13 stand provisionally rejected under the doctrine of obviousness-type double patenting over claims 1-10 of co-pending application 10/182,620, claims 1-9 of co-pending application 10/182,654, claims 1-15 of co-pending application 10/103,733 or claims 1-6 of co-pending application 10/485,514 in view of Bundgaard et al., Budt et al., Schulte et al. and Aungst.

**RESPONSE**

Previous claims 1-14 have been canceled without prejudice to or disclaimer of the subject matter contained therein, rendering the basis for this rejection moot for these claims. Further, new claims 15-30 have been introduced.

Applicants respectfully point out to the Examiner that application 10/182,620 has been abandoned and that applications

10/182,654 and 10/103,733 have issued as U.S. Patents 6,696,461 and 6,696,460, respectively. Application 10/485,514 has yet to be examined.

Therefore, this provisional obviousness-type double patenting rejection is improper for applications 10/182,620, 10/182,654 and 10/103,733. In particular, a provisional obviousness-type double patenting rejection can only be made against a co-pending application. Thus, because application 10/182,620 has been abandoned, it is no longer a "co-pending application" and this is an improper rejection. Also, because applications 10/182,654 and 10/103,733 have issued into granted patents, they are no longer "co-pending applications" and this is an improper rejection.

Regarding application 10/485,514, it is respectfully noted that the newly presented claims have a different scope than previous claims 1-14 and are not an obvious variation of the claims of the '514 application.

Accordingly, applicants respectfully request that the Examiner reconsider and withdraw these provisional rejections.

**CONCLUSION**

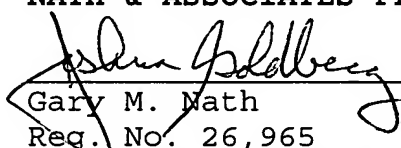
Based upon the amendments submitted herewith and the above remarks, the presently claimed subject matter is believed to be novel and patentably distinguishable over the prior art of record. The Examiner is therefore respectfully requested to reconsider and withdraw the objection and rejection and allow pending claims 15-30. Favorable action with an early allowance of the claims pending in this application is earnestly solicited.

The Examiner is welcomed to telephone the undersigned attorney if he has any questions or comments.

Date: April 13, 2006  
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Respectfully submitted,  
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# PATENT COOPERATION TREATY UW:

**PCT**

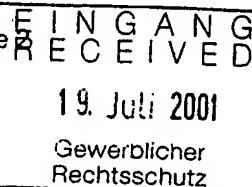
## NOTIFICATION CONCERNING SUBMISSION OR TRANSMITTAL OF PRIORITY DOCUMENT

(PCT Administrative Instructions, Section 411)

From the INTERNATIONAL BUREAU

To:

BYK GULDEN LOMBERG CHEMISCHE  
FABRIK GMBH  
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ALLEMAGNE



Date of mailing (day/month/year) 09 July 2001 (09.07.01)	
Applicant's or agent's file reference B690WOORD01	<b>IMPORTANT NOTIFICATION</b>
International application No. PCT/EP01/03514	International filing date (day/month/year) 28 March 2001 (28.03.01)
International publication date (day/month/year) Not yet published	Priority date (day/month/year) 29 March 2000 (29.03.00)
Applicant BYK GULDEN LOMBERG CHEMISCHE FABRIK GMBH et al	

1. The applicant is hereby notified of the date of receipt (except where the letters "NR" appear in the right-hand column) by the International Bureau of the priority document(s) relating to the earlier application(s) indicated below. Unless otherwise indicated by an asterisk appearing next to a date of receipt, or by the letters "NR" in the right-hand column, the priority document concerned was submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b).
2. This updates and replaces any previously issued notification concerning submission or transmittal of priority documents.
3. An asterisk(\*) appearing next to a date of receipt, in the right-hand column, denotes a priority document submitted or transmitted to the International Bureau but not in compliance with Rule 17.1(a) or (b). In such a case, the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.
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<u>Priority date</u>	<u>Priority application No.</u>	<u>Country or regional Office or PCT receiving Office</u>	<u>Date of receipt of priority document</u>
29 Marc 2000 (29.03.00) ✓	00106695.0 ✓	EP	12 June 2001 (12.06.01) ✓

<p style="text-align: center;">The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No. (41-22) 740.14.35</p>	<p>Authorized officer</p> <p style="text-align: center;">N. Wagner </p> <p>Telephone No. (41-22) 338.83.38</p>
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